

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method for manufacturing a surface emitting semiconductor laser, the method comprising:

forming, on the main surface of a semiconductor substrate, a lower reflection layer, an active layer in which a quantum well layer is formed, and an upper reflection layer having a surface layer which forms a light emitting surface of a light emitting region on an inner layer side or an upper layer side of said upper reflection layer;

forming a post portion in the shape of a pillar with at least the upper reflection layer partially remaining;

forming a boundary region for suppressing light emission of oscillation modes except for a plurality of specific oscillation modes; and

substantially forming a light emitting spot corresponding to the specific oscillation mode by processing a part of the region of the surface of the upper reflection layer which is exposed to the surface of the post portion.

2. (Previously Presented) A method for manufacturing a surface emitting semiconductor laser according to claim 1, wherein forming the lower reflection layer, the active layer and the upper reflection layer includes forming an etch preventing layer on the lower layer side of the surface layer.

3. (Original) The method of claim 1, wherein forming the lower reflection layer, the active layer and the upper reflection layer comprises laminating the lower reflection layer, the active layer and the upper reflection layer.

4. (Original) The method of claim 3, wherein laminating the lower reflection layer, the active layer and the upper reflection layer comprises laminating in sequence the lower reflection layer, the active layer and the upper reflection layer.

5. (Currently Amended) A method for manufacturing a surface emitting semiconductor laser, the method comprising:

forming, on the main surface of a semiconductor substrate, a lower reflection layer, an active layer in which a quantum well layer is formed, and an upper reflection layer having a surface layer which forms a light emitting surface of a single light emitting region on an inner layer side or an upper layer side of said upper reflection layer;

forming a post portion in the shape of a pillar with at least the upper reflection layer partially remaining;

forming a boundary region for suppressing light emission of oscillation modes except for a specific oscillation mode; and

substantially forming a light emitting spot corresponding to the specific oscillation mode by processing a part of the region of the surface of the upper reflection layer which is exposed to the surface of the post portion,

wherein forming the lower reflection layer, the active layer and the upper reflection layer includes forming an etch preventing layer on the lower layer side of the surface layer, and wherein forming the etch preventing layer comprises laminating the etch preventing layer on the lower layer side of the surface layer.

6. (Currently Amended) A method for manufacturing a surface emitting semiconductor laser, the method comprising:

forming, on the main surface of a semiconductor substrate, a lower reflection layer, an active layer in which a quantum well layer is formed, and an upper reflection layer

having a surface layer which forms a light emitting surface of a light emitting region on an inner layer side or an upper layer side of said upper reflection layer;

forming a post portion in the shape of a pillar with at least the upper reflection layer partially remaining;

forming a boundary region for suppressing light emission of oscillation modes except for a specific oscillation mode; and

substantially forming a light emitting spot corresponding to the specific oscillation mode by processing a part of the region of the surface of the upper reflection layer which is exposed to the surface of the post ~~portion~~portion;

wherein a media of the surface layer which forms the light emitting surface of the light emitting region has a different refractive index than a media of a surface layer of a neighboring light emitting region.

7. (Currently Amended) A method for manufacturing a surface emitting semiconductor laser according to claim 6, wherein forming the lower reflection layer, the active layer and the upper reflection layer includes forming an ~~etching~~etch preventing layer on the lower layer side of the surface layer.

8. (Previously Presented) The method of claim 6, wherein forming the lower reflection layer, the active layer and the upper reflection layer comprises laminating the lower reflection layer, the active layer and the upper reflection layer.

9. (Previously Presented) The method of claim 8, wherein laminating the lower reflection layer, the active layer and the upper reflection layer comprises laminating in sequence the lower reflection layer, the active layer and the upper reflection layer.

10. (Currently Amended) The method of claim 7, wherein forming the ~~etching~~etch preventing layer comprises laminating the etching preventing layer on the lower layer side of the surface layer.